

SCS ENGINEERS

May 27, 2008
File No. 02199312.02-2

Mr. Johnny Beal
Facility Manager
Wake County Solid Waste Management Division
PO Box 550
Raleigh, North Carolina 27602



Subject: Landfill Gas Monitoring Results – April 9, 2008
North Wake Landfill – Raleigh, North Carolina

Dear Mr. Beal:

SCS Engineers, PC (SCS) is pleased to submit the results of the Monthly Landfill Gas (LFG) Monitoring Event, performed at the North Wake County Landfill on April 9, 2008. This monitoring was performed in accordance with the updated Landfill Gas Remediation Plan, dated 7/12/07. A memorandum discussing the results from the Fourth Quarter Monitoring Event performed on 12/27/07, which indicated elevated methane levels at several probes, was distributed to Wake Gas Producers (WGP) and Wake County on 12/31/07. Correspondence serving as notification of the methane exceedances detected at LFG monitoring probes M-3, M-22, M-23, M-24, and M-26 was submitted to NCDENR on 1/3/08.

SCS used a GEM-500 Infrared Gas Analyzer to measure subsurface concentrations of methane, carbon dioxide, oxygen, balance gas, and pressure at the five gas monitoring probes that previously exhibited methane levels in excess of the regulatory limit. The monitoring results are presented in Exhibit 1.

As presented on Exhibit 1, the methane concentrations have decreased in LFG probes M-3, M-22, M-23, and M-24 below the compliance threshold. Methane concentrations measured increased in probe M-26 continue to be greater than the regulatory limit.

Because LFG probes M-3, M-22, M-23, and M-24 have demonstrated methane concentrations below the compliance threshold for at least three consecutive months, the monitoring frequency will return to a quarterly basis for these probes, as stipulated in the updated LFG Remediation Plan. SCS will continue to conduct monitoring at probe M-26 on a monthly basis until it demonstrates measurements below the compliance threshold for three consecutive months.

WGP has increased the applied vacuum to the perimeter migration control system per our request, but the methane levels in LFG probe M-26 remain elevated. SCS met with County personnel on 4/17/08 and discussed implementation of continued corrective actions to remediate this exceedance. SCS developed the design of an expansion to the LFG migration



EXHIBIT 1. LANDFILL GAS MONITORING PROBES NORTH WAKE LANDFILL - WAKE COUNTY, NORTH CAROLINA

Date: April 9, 2008
Project No: 02199312.02-2
Weather: Sunny 60°F

Personnel: DBK
Equipment: GEM-500

Monitoring Probe No.	Time (24-hr)	Methane (% vol)	Carbon Dioxide (% vol)	Oxygen (% vol)	Balance Gas (% vol)	Pressure (in-wc)	Interior Monitoring Location	Methane (% vol)
M 1	NM	NM	NM	NM	NM	NM	Scale House	NM
M 2	NM	NM	NM	NM	NM	NM	Front Office	NM
M 3	12:51	0.1	0	19.9	80	0	Bathrooms (2)	NM
M 4	NM	NM	NM	NM	NM	NM	Hallway	NM
M 5	NM	NM	NM	NM	NM	NM	Kitchen	NM
M 6R	NM	NM	NM	NM	NM	NM	Admin. Offices	NM
M 7	NM	NM	NM	NM	NM	NM	Offices (4)	NM
M 8	NM	NM	NM	NM	NM	NM	Reception Area	NM
M 9	NM	NM	NM	NM	NM	NM	Bathrooms (2)	NM
M 10	NM	NM	NM	NM	NM	NM	Conference Area	NM
M 11	NM	NM	NM	NM	NM	NM	Kitchen	NM
M 12	NM	NM	NM	NM	NM	NM	Storage Area	NM
M 13	NM	NM	NM	NM	NM	NM	Drop Off/Transfer	NM
M 14	NM	NM	NM	NM	NM	NM	Office	NM
M 15	NM	NM	NM	NM	NM	NM	Service Bay	NM
M 16	NM	NM	NM	NM	NM	NM	Maintenance Shop	NM
M 17	NM	NM	NM	NM	NM	NM	Service Bay	NM
M 18	NM	NM	NM	NM	NM	NM	Equipment Maintenance Trailer	NM
M 19	NM	NM	NM	NM	NM	NM	Offices (2)	NM
M 20	NM	NM	NM	NM	NM	NM	Bathroom	NM
M 21	NM	NM	NM	NM	NM	NM	Conference Area	NM
M 22	12:27	0.2	0.3	19.8	79.7	-0.9	Field Storage Building (Wake County)	NM
M 23	12:35	0.1	0	20.1	79.8	-0.3	Service Bay	NM
M 24	12:40	0	0	20	80	-0.2	Drop Off/Transfer	NM
M 25	NM	NM	NM	NM	NM	NM	Offices (6)	NM
M 26	12:59	62.2	37.8	0	0	-0.7	Bathrooms (2)	NM
							Conference Area	NM
							Break Room/Kitchen	NM
							Reception	NM
							Sign Shop	NM
							Copy/Storage Room	NM
							Project Room	NM
							Tool Room	NM
							Shipping and Receiving	NM

Notes: NM = Not Monitored